



NASA Procedural Requirements

COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES

NPR 1441.1E

Effective Date: January 29,
2015

Expiration Date: November
30, 2021

NASA Records Management Program Requirements (Updated w/Change 3)

Responsible Office: Office of the Chief Information Officer

NOTE: The NASA Record Retention Schedules (NRRS), is published as a separate document entitled, NRRS 1441.1, NASA Record Retention Schedules

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Change Log

Chg#	Date	Description/Comments
3	04/14/2021	Administrative edits made to align paragraphs 5.4.5a and 5.4.5b with the Agency's current process for capturing, managing, and disposing e-mail records.
2	04/06/2021	Administrative edits made to update the definition for "records" in Appendix A.
1	09/21/2017	Chapter 5 updated to add new requirement that brings NASA procedural requirements into compliance with the Presidential and Federal Records Act Amendments of 2014 to: -Ensure proper preservation of email of separated employees. -Prohibit employees from creating NASA business communications using non-NASA accounts (e.g., personal email accounts), unless the official nasa.gov account is cc'd or the message is forwarded to the account within 20 days.

Preface

P.1 Purpose

- a. This NASA Procedural Requirements (NPR) directive establishes procedural requirements in accordance with 36 Code of Federal Regulations (CFR) Chapter XII, Records Management, and NASA Policy Directive (NPD) 1440.6, NASA Records Management. It provides overall, high-level direction to NASA Centers for implementation and ongoing operation of an effective Records Management (RM) program at the Agency level and within each Center, while allowing flexibility for establishment and implementation of local procedures and processes to meet specific needs of Center-level directorates, mission programs, and offices.
- b. It establishes minimum requirements for managing NASA record information throughout its life cycle -- from creation/collection, categorization, maintenance, and operational use; through retention after active use ("retirement"); to eventual disposition by destruction or transfer to the National Archives for historical preservation.
- c. It also establishes the procedural requirements for development, maintenance, and use of NASA Records Retention Schedules contained in a separate publication, NRRS 1441.1, NASA Records Retention Schedules (NRRS), published in NASA Online Directives Information System (NODIS) under "other documents," that govern the length of records retention and their final disposition.

P.2 Applicability

- a. This NPR is applicable to NASA Headquarters (HQ) and NASA Centers, including Component Facilities and Technical and Service Support Centers. These requirements apply to Jet Propulsion Laboratory (JPL), a Federally Funded Research and Development Center, other contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the suitable contracts, grants, or agreements.
- b. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.
- c. In this directive, all document citations are assumed to be the latest version, unless otherwise noted.

P.3 Authority

- a. Records Management by the Archivist of the United States and by the Administrator of the General Services, 44 U.S.C. §§ 2901 et seq.
- b. Disposal of Records, 44 U.S.C. §§ 3301 et seq.
- c. Records Management, 36 CFR, Chapter XII, Subchapter B.
- d. NPD 1440.6, NASA Records Management.

P.4 Applicable Documents and Forms

- a. NPD 2800.1, Managing Information Technology.
- b. NPR 1040.1, NASA Continuity of Operations (COOP) Planning Procedural Requirements.
- c. NPR 2190.1, NASA Export Control Program.
- d. NPR 9660.1, Vital Financial Records for Emergency Operations.
- e. NID 1600.55, Sensitive But Unclassified (SBU) Controlled Information.
- f. NID 7120.99, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements.
- g. ISO 15489, Information and Documentation - Records Management.
- h. NASA Form 1786, Inter- or Intra-Agency Transfer of NASA Records Agreement.
- i. Standard Form 115, Request for Records Disposition.
- j. Standard Form 135, Records Transmittal and Receipt.

- k. National Archives and Records Administration (NARA) General Records Schedules.
- l. [IT-HBK 1440.01](#), Records Planning and Management.
- m. [IT-HBK 1441.01](#), Records Retention and Disposition.
- n. [ITS-HBK 1382.03-01](#) Privacy Risk Management and Compliance: Collections, PIAs, and SORNs.
- o. NRRS 1441.1, NASA Records Retention Schedules.

P.5 Measurement/Verification

a. In order to determine the extent to which NASA employees follow the required processes specified in this NPR:

- (1) The NASA Records Officer shall conduct periodic Agency RM self-assessments on behalf of the Senior Agency Official (SAO) for Records Management and report the results to NARA.
- (2) The NASA Records Officer shall conduct other periodic reviews and assessments of NASA Centers' RM Programs to assess overall and/or specific effectiveness and compliance with relevant regulations and policies.
- (3) Center Records Managers shall conduct periodic internal self-assessments of Records Management implementation by organizations and projects at their Centers.

P.6 Cancellation

NPR 1441.1D, NASA Records Retention Schedules, dated February 24, 2003. Note for reviewers: NASA Records Retention Schedules (NRRS) previously in NPR 1441.1 are also being updated and will be incorporated by reference in the NPR. The NRRS will be published in a separate document numbered "NRRS 1441.1," titled "NASA Records Retention Schedules."

Chapter 1. NASA Records Management Program Overview

1.1 Records

1.1.1 All Federal agencies are required by law and Agency policy to maintain and preserve records. The heads of Federal agencies are responsible for preventing any unlawful alteration, removal, or any accidental or unauthorized destruction of records.

1.1.2 Records (or Federal records) are defined in 44 U.S.C. §3301 as "all books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or suitable for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations or other activities of the Government or because of the informational value of the data in them."

1.1.3 Nonrecord materials include those Federally owned informational or documentary materials that do not meet the statutory definition of records (44 U.S.C. §3301) or that have been excluded from coverage by the definition. Excluded materials include reference and duplicative information or materials intended solely for exhibit.

1.1.4 Documentary materials are NASA records when they meet both of the following conditions:

- a. They are made or received by NASA under Federal law or in connection with the transaction of agency business, and
- b. They are preserved or are suitable for preservation as evidence of NASA organization and activities or because of the value of the information they contain.

1.2 Information vs. Records

1.2.1 Information comes in a variety of forms and formats and the digital age has led to the creation of a multitude of new formats. The format of documentation does not alter the retention value of the content of the documentation (whether paper, film, photograph, electronic communications, notices/announcements created as blog entries, or other Web application content, or content residing in a cloud).

1.2.2 Information, regardless of format, constitutes a record when it meets the definition of a record provided in 1.1.2.

1.3 "Permanent" and "Temporary" Records Differentiated

1.3.1 A permanent record is any Federal record of such historical significance as to warrant NARA's authorization of its preservation in the National Archives beyond the time that it is needed for NASA administrative, legal, or fiscal purposes. Permanent records are indicated as such in the NRRS with a permanent disposition authority. An example of permanent records are those of senior NASA managers specified in NRRS 1/item 22.A.1. All such records will be accessioned by NARA into the National Archives for preservation for the life of the Republic..

1.3.2 A temporary record is any record which has been determined by the Archivist of the United States to have insufficient value (on the basis of current standards) to warrant its permanent preservation by the National Archives. Temporary records are approved by NARA for disposal after a specified retention period which is provided in the NRRS. This does not mean that a temporary record may, by default, be destroyed immediately.

1.4 Media Neutrality

1.4.1 The basic requirements for records management (e.g., identification, protection, management, and disposition) are considered "media neutral" in that they apply to all records regardless of their format. While there may be additional requirements for specific records formats, all procedural requirements in this document are considered media neutral unless otherwise noted.

1.4.2 Records that are created electronically, e.g., "born digital," are managed electronically. NASA's approach to addressing the management of certain digital content (e.g., e-mail, cloud, and social media content) is addressed in Chapter 5.

1.4.3 Complex data and software objects within systems, including analysis and design models (e.g. trajectory analysis or structural design models) that serve as indispensable contributors to records themselves should be

delivered in formats (such as a lightweight format) or standard that accommodate long-term data accessibility.

1.5 Introduction to Records Life Cycle

1.5.1 This requirements document utilizes a "Records Life Cycle" concept as a framework for defining and prescribing Agency-wide processes to ensure management of records and valued information assets throughout their life cycle. The records' uses differ as do the requirements for managing them at different phases of the records' lives. The records life-cycle concept is also used as an organizing framework within Chapter 3 of this NPR, with sections containing the procedural requirements for each of the four life-cycle phases.

1.5.2 Figure 1 illustrates the Records Life Cycle. Records are either created or received by NASA employees or contractors in the course of conducting NASA business. During their active use phase, the records are used for various purposes by NASA in its business processes. However, there comes a time (inactive or semi-active phase) when the records are only occasionally sought for reference purposes. After the inactive records have fulfilled their authorized retention periods, they are either destroyed, if temporary records, or transferred to the National Archives, if permanently valued. In addition, copies of inactive records or records due for disposition may at times be brought into a new NASA office or function to be used as inputs for the new business processes. An example of such re-purposing was the Space Launch System Program's incorporation of temporary Solid Rocket Booster records from the completed Space Shuttle Program, with careful documentation to maintain traceability of the records' history.

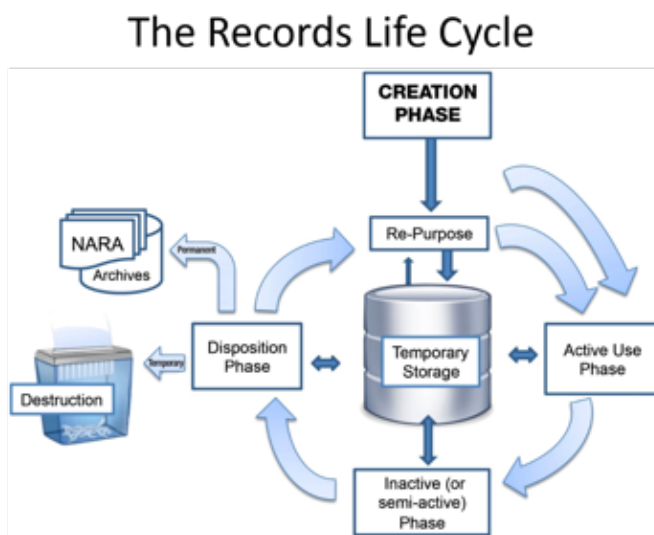


Figure 1, Records Life Cycle

1.5.3 The Records Life Cycle model and approach is further described in IT-HBK 1440.01, Records Planning and Management, along with more detailed explanations and procedures/guidelines for its use.

Chapter 2. NASA Records Management Responsibilities

2.1 The NASA Chief Information Officer (CIO) shall:

- a. Have overall responsibility for the NASA RM Program.
- b. Ensure that the Agency information technology (IT) project governance process incorporates RM requirements in the design or acquisition of new or significantly revised Electronic Information Systems (EIS) or services.

2.2 NASA Office of the General Counsel shall:

- a. Review and concur on all new or revised records retention schedules for NASA records.
- b. Issue notification and requirements of Agency-wide or Headquarters legal record holds necessitated by litigation or investigations.

2.3 Center Chief Counsels shall:

- 2.3.1. Issue notification and requirements of Center legal record holds necessitated by litigation or investigations.

2.4 Inspector General shall:

- 2.4.1 The NASA Inspector General shall issue notification and requirements of record holds necessitated by audits or inspections conducted by the Office of Inspector General (OIG).

2.5 NASA Center CIOs shall:

- a. Ensure records management requirements are addressed in the development or acquisition of any new or significantly revised Center specific systems or services.
- b. Provide Center processes for migration of inactive digital records to updated formats and media to permit records retrieval throughout their scheduled life cycle.

2.6 NASA Records Officer shall:

- a. Establish and direct the NASA RM Program and its associated procedures.
- b. Administer the process of developing and submitting new or revised retention schedules for approval by the Archivist of the United States.
- c. Maintain and publish procedures, records retention schedules, guidance, and current information to assist Agency personnel in implementation of these procedural requirements.
- d. Make RM training available so Agency personnel understand their responsibilities for protecting and managing the records they create, receive, or maintain.
- e. Approve all transfers of permanent NASA records to the National Archives.
- f. Implement and orchestrate regular assessments of the effectiveness of RM across the Agency.
- g. Collaborate with IT personnel in implementing digital management of records that span the Agency.
- h. Provide consultation to functions establishing record requirements for an Agency-wide procurement action, partnership, or agreement that will involve creation, receipt, or management of records documenting Agency functions.
- i. Assist attorneys with record holds and discovery requests that span multiple NASA Centers.
- j. Oversee all other Agency-level aspects of the RM program.

2.7 Center Records Managers shall:

- a. Establish and administer Center RM procedures for identifying, classifying, maintaining, and disposing of records across their Center.

- b. Identify storage locations and provide Center procedures for movement of inactive records into and out of those locations until the records have met their retention periods.
- c. Coordinate transfers of records custody from one Center organization to another, or from one Center to another NASA Center, Agency, or NARA facility.
- d. Collaborate with IT personnel in implementation of digital records management of Center records.
- e. Provide records consultation to functions establishing requirements for Center procurement actions, partnerships, or agreements that will involve creation, receipt, or management of records documenting Center functions.
- f. Coordinate with impacted organizations all record holds and legal discovery actions involving Center records.
- g. Coordinate with Center Offices of Human Resources to integrated records management into the employee exit clearance process.

2.8 Center Records Liaison Officers (RLOs) shall:

- a. Sustain general knowledge of the records, both functional mission and administrative, within their specific offices.
- b. Communicate/disseminate records-related information from the Center Records Manager to their offices.
- c. Coordinate the compilation of organizational/office records listings to meet Center procedural requirements as discussed in the next chapter.
- d. Oversee and consult with organization/office personnel to ensure proper management and disposition of records.

2.9 Records Owners shall:

- a. Differentiate, and ensure segregation of, record from nonrecord material produced or received in performance of their function.
- b. Ensure applicable records access restrictions are associated with their records and appropriate protections implemented.
- c. Ensure records for which they are responsible are managed and dispositioned in accordance with the requirements of this NPR.

2.10 Information System Owners shall:

- a. Identify records management as a documented requirement when developing or acquiring an EIS or automated tool that will create or maintain NASA records.
- b. Implement processes to periodically migrate records within the system to newer formats to maintain records classifications, immutability, and retrievability.
- c. Implement disposition of electronic records in accordance with the requirements of Records Owners and this NPR.
- d. Coordinate system records management capabilities with their primary Center technical repositories' capabilities to provide an efficient and coordinated data management strategy that supports both engineering data and records management long-term storage, retrieval, and use case objectives.

2.11 All NASA employees shall:

- a. Determine if information they create, receive, or manage (e.g., book, papers, documents, pictures, e-mail) in the course of performing NASA business is "record" or "nonrecord."
- b. Manage records that they have created or received in accordance with this NPR.
- c. Ensure all records under their control are dispositioned only in accordance with NRRS 1441.1, NASA Records Retention Schedules or General Records Schedules (GRS).

Chapter 3. Records Life-Cycle Governance

Procedural Requirements

3.1 Records Creation Phase

3.1.1 Upon formulation of a new organization or NASA program or project, managers/process owners over NASA offices should identify all planned systems or applications within their office that will contain Federal records.

3.1.2 RM considerations shall be addressed during the development and implementation of new business processes, programs, and projects by NASA Records Owners in coordination with their Center Records Manager. Situations and types of activities where RM considerations are relevant include:

- a. Data management planning and implementation, both long and short term.
- b. Organizational/mission changes that will result in creation of new records or re-purposing legacy records previously maintained by another organization/function or for another purpose.
- c. Continuous Process Improvement projects that will result in creation of new records or re-purposing of legacy records.
- d. Development, major upgrade, or acquisition of agency information systems/applications.

3.1.3 All records groups (series) that will be created in the new or modified business processes, programs, and systems projects shall be identified and assessed by Records Owners. The Records Owners should specifically identify:

- a. Where records will be stored/maintained -- physical location or EIS and where it is housed.
- b. Record series description and pertinent NRRS or GRS items citations.
- c. Unscheduled record series needing new or revised schedule items.
- d. Ownership and record custodianship for each record series.
- e. How and when each record series will be reviewed and cut off, or other external event that will trigger a change from record active use life-cycle phase to inactive use. This cutoff serves as the start point for required retention periods and calculation of authorized disposition dates.
- f. Appropriate access or use restrictions through consultation with suitable functional experts. Examples of such restrictions include International Traffic in Arms Regulations (ITAR), Export Control, Personally Identifiable Information (PII)/Privacy Act, Information in Identifiable Form (IIF), or other Controlled Unclassified Information/Sensitive But Unclassified (CUI/SBU).

Note: Reference: NPR 2190.1, NASA Export Control Program, ITS-HBK-1382.03-01, Privacy Risk Management and Compliance: Collections, Privacy Impact Assessments (PIAs) and System of Records Notices (SORNs), and NID 1600.55, Sensitive But Unclassified (SBU) Controlled Information.

(1) Restriction determinations for electronic systems based on the records content may be accomplished via Records or Systems Owners completion of Initial Privacy Threshold Analyses (IPTAs)/PIAs in the Privacy and Controlled Unclassified Information (CUI) Assessment Tool (PCAT).

(2) To ensure suitable restrictions are enforced throughout the life cycle, records shall be properly identified or "tagged" as they are created by the Records Creator in accordance with appropriate Agency policy for the particular restriction.

3.1.4 When embarking on a contractual or service agreement with a third party, the relevance of Federal records to the resultant partnerships shall be evaluated and addressed by requiring organization(s) as necessary, in consultation with the Center Records Manager.

3.1.5 This NPR establishes requirements to ensure records' reliability, authenticity, integrity, usability, and preservation content, context, and structure, as required by 36 CFR 1236. General requirements in NPR 7120.7 (currently NID 7120.99) require records management considerations to be addressed as part of the IT systems development project life cycle and in NASA's IT systems governance processes.

3.1.5.1 Managers/process owners over NASA offices should identify all systems or applications within their office that will contain Federal records. Such identification should be accomplished at the formulation of a new organization or NASA program or project.

3.1.5.2 In order to ensure the proper management, maintenance, and disposition of their records, Records Owners shall:

a. Identify RM functional requirements for a system or application that is to house the records.

b. Document administrative processes external to the system that will fulfill RM requirements in cases when a decision is made to use a system that fails to provide proper management of the records.

3.1.5.3 In accordance with NPD 1440.6 and NPD 2800.1, NASA System Owners are required to ensure that records controls are incorporated into any EIS that contain NASA records. Alternatively, controls may be integrated into a recordkeeping system or process that is external to the EIS itself.

3.1.5.4 System Owners and IT project managers shall address RM considerations and requirements in all projects utilizing the 7120.7 (currently NID 7120.99) IT Projects methodology, during which appropriate records management personnel (i.e., RLOs, Center Records Manager, or NASA Records Officer) should be consulted.

a. Appendix C contains a "Records Management Core Element Checklist" which may be used as a tool for assessing basic RM functionality during the early conceptualization and planning phases of NASA IT systems development/acquisition/refresh projects, as defined in NPR 7120.7. A more detailed explanation of the origin, purpose, and use of the Core Elements Checklist can be found in IT-HBK-1440.01.

b. When a decision during the early conceptualization and planning phase of an IT systems project is made to integrate RM capabilities into the design and development of a system itself, controls prescribed in 36 CFR 1236 shall be built into the system to ensure such properties as records' reliability, authenticity, integrity, and usability.

c. More information about RM functionalities that must be included in systems and applications is

provided in IT-HBK-1440.01, along with elaboration of RM touch points in the IT Projects Life-Cycle Governance process and definition of RM criteria for determining readiness of the system to advance from one project development phase to the next. The handbook provides an assessment tool for a more in-depth records analysis and assessment from which one of three architectural or strategy options may be determined for recommendation to the applicable IT Systems Project Governance Board.

d. System Owners shall include costs of compliance with this NPR when developing the business case for a new or updated existing system.

e. When a decision is made to not include RM functionality in a new or updated system, an alternate plan for managing records external to the system shall be developed and presented at appropriate review gates.

3.2 Active Use Records Phase

3.2.1 Records Management roles during the active use phase of a records life cycle are those that help ensure or facilitate ease of access to record information for ongoing business/mission uses. This section addresses requirements for identifying records, where they are located, facilitation of their retrieval, and their protection.

3.2.2 Records accounting

3.2.2.1 To account for all the records for which an organization is responsible, a complete records listing shall be created and maintained by each organizational unit RLO. This listing is sometimes called a "records plan," "file plan," "Master Records Index (MRI)," or other similar names, in accordance with Center policies. These listings describe all the records series belonging to the organizational unit.

3.2.2.2 The listing should include the following minimum important information about each record series:

- a. Agency Filing Scheme (AFS) code. (Reference Appendix D.)
- b. Title or summarized description.
- c. Owning organization.
- d. Records custodian.
- e. Location (if paper/physical media records) or system/repository (electronic/digital media records) where records reside, even if in an EIS located at or run by another organization or Center.
- f. Pertinent NRRS or GRS retention schedule item.

3.2.3 Organizing records

3.2.3.1 A classification scheme (the AFS or its derivative) that can be used to logically categorize records holdings based on function or business process should be developed by each Center Records Manager or organizational unit RLO:

- a. For physical records, this scheme is used to organize record holdings in file cabinets, file rooms, or temporary records storage/staging facilities.

b. For electronic records, the scheme is used in folder/directory structures and/or as keyword or metadata tags to accomplish the same purpose.

3.2.4 Locating records

3.2.4.1 Effective indexing and search methodologies that facilitate locating and retrieving records shall be implemented by Records Owners. Indexing/search approaches include, but are not limited to:

- a. Metadata tagging and keyword indexing such as AFS and/or other key identifying attributes that will be usable even after the records' active life has expired.
- b. Database search capabilities using either metadata/keyword tag criteria, full-text search, or a combination of both.
- c. "Federated search" technologies (allowing records to be located using any of the above methods across multiple repositories, Line of Business (LOB) systems and locations).

3.2.5 Protection and management of records

3.2.5.1 Proper RM controls that ensure records are managed and protected against unauthorized access, change, or destruction shall be established and documented by Records Owners in their office procedures for hard copy records or system IT security plan for electronic records. Controls will include, but not be limited to:

- a. Roles based access controls (i.e., user access to a system or its functionalities based on the role of the user).
- b. Safe and environmentally stable storage conditions to protect the record from unauthorized access, deterioration, other alteration, or destruction, with backup and restoration plans for records in EIS.
- c. Controls to ensure no one may destroy records outside of authorized channels and that destruction is accomplished only in accordance with approved records retention schedules.

3.2.5.2 Records may not be removed from the Agency, except in the course of official business or scheduled records disposition.

(a) A records clearance process for all outgoing NASA personnel, including management, shall be implemented by Center Records Managers to ensure proper transition of any records custody and prevent unauthorized removal of Federal records. The process should ensure officials and employees do not remove records from the Agency without Center Records Manager or NASA Records Officer approval, in accordance with 36 CFR 1222.18, except in the course of official business.

(b) Unauthorized removal of records from the Agency shall be reported following the procedural requirements set forth in 3.4.3.3.

3.2.6 Converting analog records to digital

3.2.6.1 When a NASA organization has a business need to convert legacy analog (paper/film) records to digital formats, the Records Owner and the Center Records Manager shall ensure the conversion is to NARA-preferred formats whenever possible and always in the case of permanent records. Records owners and Center Records Managers should consult the most current NARA preferences and/or format requirements published on its agency's Web site.

3.2.7 Identification, protection, and availability of essential/vital records

3.2.7.1 Identification, protection, and availability of essential/vital records in case of emergencies shall be ensured by Records Owners, working with Vital Records Managers, in accordance with 36 CFR 1223, NPR 1040.1, NASA Continuity of Operations (COOP) Planning Procedural Requirements and NPR 9660.1, Vital Financial Records for Emergency Operations.

3.2.8 Records of terminated projects or offices

3.2.8.1 In cases where organizations, programs, or projects terminate and records are not being transferred to another ongoing office, managers should follow Center procedures or Center RM direction for disposition of records that have not yet met their retention. Programs and projects may see IT-HBK 1441.01 for records disposition guidance.

3.2.9 Inter- or Intra-agency records transfers and loans

3.2.9.1 NASA Form NF-1786, Inter- or Intra-Agency Transfer of NASA Records Agreement, shall be completed by Records Custodians and associated Center Records Managers when there is a business need for custody of records to be transferred from one NASA Center, directorate, program/project office or business office to another, or from NASA to another Agency.

Note: Instructions for completing the form are on NF-1786.

3.2.9.2 When the Receiving Office represents a NASA Program/Project, and the records are received from another NASA Program/Project, the manager of the Receiving Office shall:

- a. Maintain the records in such a manner so as to retain the identity of the originating Program and/or Project.
- b. Dispose the records in accordance with the approved retention schedule indicated in the NF-1786 agreement when the records are no longer needed for active use.

(1) When the retention instructions are dependent upon Program completion, the completion date of the originating Program/Project shall be the disposition contingency date or records "cutoff" point discussed later in this chapter.

3.2.9.3 If the required transfer of custody is between two organizational units within a Center (or HQ), the Center or Headquarters Records Manager shall document the transfer using locally established policies and procedures.

3.2.9.4 There are occasions when Center history functions, Communications, or other offices have cause to loan records for displays or holdings by other repositories.

- a. NASA may loan temporary records without NARA approval in accordance with 36 CFR 1228. However, Center Records Managers shall ensure that such loans are documented in agreements between the loaning and receiving organizations that specify what records are being loaned, the duration and other conditions of the loan, and responsibilities for maintenance and return of the records.
- b. Any loan of permanent records outside of the Agency must be coordinated with Center Records Manager and approved by NARA, in accordance with 36 CFR 1218. Center Records Managers shall ensure conditions of the loan are documented in an agreement, to which NARA is a party, that specifies the records to be loaned, the conditions and duration of the loan, and how the records are to

be

maintained and returned.

3.3 Inactive Records Phase

3.3.1 If records (permanent or temporary) have fulfilled their active usefulness, but have not yet fulfilled their retention period, the Records Custodian shall coordinate with the Center Records Manager to determine the available records storage options and costs for storing the records until their retention period is fulfilled and they are due for disposition.

3.3.2 If permanent records have fulfilled their active use and have no further value to the Agency, the Records Custodians may coordinate with the Center Records Manager to initiate an early transfer to the National Archives. (See Disposition of Permanent Records in Section 3.4.4.)

3.3.3 In cases where organizations, programs, or projects terminate, records disposition may follow one of two processes. Programs and projects may see IT-HBK 1440.01 for program records disposition guidance.

a. If records are transferring to another ongoing office, Records Custodians should follow requirements to document an Intra-Agency transfer. (See Section 3.4.9)

b. If records are not transferring to another ongoing office, Records Custodians should follow Center procedures or Center RM direction for disposition of records in Sections 3.5.1 or 3.5.2.

3.3.4 Storage of inactive digital records.

3.3.4.1 The Center CIO shall provide guidance for periodic migrations to update both format and media of Center digital records so records remain retrievable throughout their life cycle. The National Archives and/or industry standards for migrating media should be consulted, particularly in the storage of permanent records.

3.3.4.2 Inactive digital records, regardless of whether of temporary or permanent retention value, shall be periodically migrated to current formats and/or systems by System Owners, in accordance with guidance from the Center CIO, to ensure the records are retrievable for the entire duration of their retention period, and so the Center is able to respond to any requests for the inactive records. This applies to records stored onsite or offsite at a Federal Records Center (FRC) or commercial storage facility.

3.3.4.3 There are several optional approaches for storing inactive digital records.

a. Online. Records Custodians may continue to maintain inactive records within the system where they reside until their retention period is fulfilled. If the system has some inherent RM functionality, retiring records may simply be a matter of changing the life-cycle phase state from active to inactive through the use of metadata tagging.

b. Offline or Nearline. Retirement of records to offline or nearline storage in order to avoid bogging down systems with unused records is often preferable and permissible as long as they are retained in such a way, including migration, that they may be located and retrieved in response to such need by the Agency.

c. Physical Media. Inactive digital or analog records may be moved to physical external media (e.g.,

removable hard drives, tapes, Compact Disc (CD), Digital Video Disc (DVD) for storage during completion of their retention period. However, Records Custodians/Records Owners shall ensure migration to current media to ensure records retrievability.

3.3.4.4 Records Custodians or Records Owners should utilize "cutoff points" based on the appropriate retention schedules, at which to take appropriate action to convert the records to an inactive state. Examples of cutoff points are project closeout, system decommissioning, contract final payment, or employment termination.

3.3.5 Storage of inactive paper or other physical records

3.3.5.1 A standard process for storing paper or other physical records shall be established by Center Records Managers with procedures for controlling records inventory, box or file retrieval, check-out/check-in, and disposition/destruction services.

3.3.5.2 Basic standard procedures are provided in IT-HBK 1441.01, Records Retention and Disposition, for retiring hardcopy records to the FRC which Center Records Managers may enhance with Center unique requirements.

Note: No transitory or nonrecord collections may be retired to an FRC, except through special agreement with NARA.

3.3.6 Tracking inactive records

3.3.6.1 Necessary records retirement documentation shall be completed by Records Custodians and/or RLOs, in coordination with their Center Records Manager in the preparation of a request to transfer or retrieve records.

a. Typical documentation may include a Center form, Standard Form (SF) 135, or online requests to transfer or retrieve records through NARA's online Archives and Records Centers Information System (ARCIS).

b. The records need to be accurately and adequately described in the transaction to ensure proper scheduling and retrieval, as necessary.

3.3.6.2 NARA ARCIS accounts and permissions may be provided by Center Records Managers in accordance with Center policy and procedures.

3.3.6.3 More detailed or standardized procedures and processing instructions for retirement of records to FRCs are provided in IT-HBK 1441.01, Records Retention and Disposition. The handbook includes details such as:

a. Authorized boxes/containers and packing instructions.

b. Shipping instructions.

c. Procedures for documenting chain of custody.

3.4 Records Disposition Phase

3.4.1 Disposition of records takes place after the inactive/retention phase is complete and records have fulfilled their full prescribed retention period. Disposition takes one of two forms, depending on whether the records are of deemed temporary or permanent value. Temporary records are

destroyed; permanent records are transferred to the National Archives for permanent retention.

3.4.2 Retention Schedules

3.4.2.1 All NASA records shall be dispositioned only in accordance with NRRS 1441.1 or the GRS by Records Custodians or Records Owners.

a. NRRS 1441.1, NASA Records Retention Schedules, provides records descriptions and retention/disposition instructions for records unique to NASA. These retention schedules are approved by the Archivist of the United States and provide legal authority for disposition of the records. The schedules provide titles, descriptions, retention/disposition instructions, and the disposition authority for series of NASA records.

b. NARA's GRS provides records descriptions and retention/disposition instructions for records common to multiple agencies. Retentions in the GRS always require compliance, unless NASA requires the records for a longer period of time, in which case, the Agency submits our own retention schedule for approval by NARA and incorporation into the NRRS. For NASA users' convenience, the NRRS incorporates GRS schedule items identified as records NASA maintains. In those cases, the GRS is cited as the disposal authority in brackets beneath retention/disposal instructions within the NRRS.

3.4.2.2 If an approved retention schedule cannot be identified in either the NRRS or the GRS for a set of records, the records are considered unscheduled and shall be maintained as permanent pending the approval of a retention schedule. (Reference Section 3.4.5.3 for proposing a new/revised NRRS schedule.)

3.4.3 Disposition of Temporary Records

3.4.3.1 Most NASA records are of temporary value (i.e., they will eventually be destroyed/deleted) and the retention period is largely based on the Agency's business and legal need for them. This section contains requirements for both scheduled destructions and instances of unauthorized damage, destruction, or removal of records.

3.4.3.2 Scheduled destruction.

a. Suitable local procedures for routine/periodic reviews shall be developed and implemented by Center Records Managers to identify and initiate purging of redundant and unneeded records. In developing and implementing these disposal procedures, the following factors should be considered:

(1) The ever-increasing volume of the organization's collected records and the resulting impacts on the ability to easily find/retrieve critically needed information.

(2) Risks and legal liabilities associated with possessing and possibly having to produce unneeded/redundant records for investigations or litigation.

(3) Risks and legal liabilities associated with possession of unneeded/redundant restricted access information and potential breaches of Privacy, IT Security, Export Control, or other statutory and regulatory provisions.

(4) Additional difficulties and consequences of establishing records integrity/authenticity.

(5) Costs of storing and maintaining records (including not only storage technology costs, but also IT staff resource costs to develop and support the organization's information storage infrastructure).

b. Center Records Managers shall develop local destruction authorization procedures for temporary records that have met their scheduled retention requirements and are stored in FRCs or commercial or Center storage. These procedures should address the following elements:

- (1) Initiation of the request for destruction authorization by the responsible RLO, custodian, or Records Owner.
- (2) A description of the record set and/or listing of individual records for which destruction authorization is being requested.
- (3) Identification of the applicable NRRS or GRS item authorizing destruction.
- (4) Concurrence by the applicable manager(s) of the organizational unit owning the records or, in the case of dismantled organizations, managers of the most logical office concerned with similar records.
- (5) Concurrence by Center Records Manager.
- (6) Concurrences by the Office of General Counsel (OGC) or Center Office of Chief Counsel (OCC), and/or other higher management official, as required by Center policy.
- (7) Instructions for how to handle records that are under a legal hold (destruction freeze). (Reference Chapter 4 of this NPR.)

3.4.3.3 Unauthorized damage, destruction, or removal of records.

- a. Agencies are required by 36 CFR 1230 to promptly report any unlawful/unauthorized or accidental removal, defacing, alteration, or destruction of records in the custody of that agency.
- b. Regardless of the circumstances, as soon as damage, destruction, or removal is discovered, the Center Records Manager shall immediately provide the NASA Records Officer with initial notification of the incident with as much detail as is known.
- c. The Center Records Manager shall provide the same immediate initial notification to their local NASA OIG when the incident involves any suspected unlawful or unauthorized removal, defacing, alteration, or destruction of records. The OIG will instruct the Records Manager as to any additional information required.
- d. The Center Records Manager shall quickly gather necessary details and work with the Records Owner to draft a report that will go to NARA, forwarding the draft to the Records Officer. Further assistance for preparing such reports is provided in Appendix F, "Unauthorized Records Destruction Reporting Guidance."
- e. After review and refinement, the NASA Records Officer shall submit the report of the incident to NARA in accordance with 36 CFR 1230.14.

3.4.4 Disposition of Permanent Records

3.4.4.1 Records appraised by NARA as having historical significance and necessary to preserve NASA's legacy are deemed permanent and so indicated in the NRRS. These records are eventually transferred to the National Archives for permanent retention. General permanent records transfer procedures, including some that are specific to transfer of paper and other analog/physical media permanent records, are provided in NARA bulletins and guidelines, available on NARA's Web site (www.archives.gov/records-mgmt/bulletins).

3.4.4.2 All NASA transfers of permanent records shall be initiated by a Records Custodian or Center Records Manager via a Transfer Request (TR) in NARA's Electronic Records Archives (ERA). The TR will become the complete documentation of the transfer.

Note: Pertinent hyperlinks to information on ERA and instructions for creating a TR are available on the NASA RM Web site (http://inside.nasa.gov/ocio/information/info_recgmt/index.html).

3.4.4.3 For electronic records, NARA's most recent guidance for transfer of permanent electronic records shall be followed.

3.4.4.4 In certain circumstances, NARA authorizes transfer of specifically designated collections of NASA permanent records to other archival/historical entities (e.g., Library of Congress, University Libraries, and Presidential Libraries). In such situations, the NASA Records Officer shall work with NARA and the designated receiving organization to develop transfer procedures that are agreeable to all parties.

3.4.4.5 When transferring records, the transferring organization may retain a copy of the permanent records for local use with the following considerations:

- a. The record copies should be clearly marked as "reference" to prevent the Center from attempting to transfer the records again at a later date.
- b. The Records Owner or relevant NASA Center must produce any copies of records in response to Freedom of Information Act (FOIA) or legal discovery requests.

3.4.5 Creation, Use, and Maintenance of NRRS

3.4.5.1 The NRRS 1441.1 shall be published and maintained within NODIS by the NASA Records Officer, in conjunction with the OCIO Directives Manager and/or the NODIS administrator. This includes publishing updates of the NRRS when "administrative changes" are made to a schedule item for which only notification to NARA is required rather than formal approval by the Archivist.

3.4.5.2 Local procedures for notification of Center personnel of NRRS updates shall be established by Center Records Managers. Possible techniques/processes for this purpose include:

- a. Posting links to NRRS 1441.1 on Center Records Manager Web pages.
- b. All employee or RLO e-mail distribution.

3.4.5.3 NRRS Schedule Changes. a. Proposals for new or revised retention schedules shall be submitted, as necessary, by Center Records Managers to the NASA Records Officer for NASA coordination, if needed, and NARA approval.

b. For unscheduled records (i.e., records for which no retention schedule can be identified), a new retention schedule shall be proposed by the Records Custodian or RLO in coordination with their Center Records Manager.

c. The Records Custodian or RLO should initiate required updates to NRRS 1441.1 in a timely fashion to ensure accurate and approved retention/disposition authorities for their records.

d. Reference Appendix E for more detailed steps in the process for making changes to the NRRS.

Chapter 4. Legal Holds

4.1 Purpose of Legal Holds

4.1.1 This chapter provides NASA requirements concerning the retention of record and nonrecord documents, including Electronically Stored Information (ESI), related to discovery or other litigation-related purposes. A "legal hold" is the procedure for identifying and ensuring the preservation of record and nonrecord materials that are or might become relevant to pending or potential litigation. A legal hold overrides any records retention schedule or any other agency policy that may otherwise call for the transfer, disposal, or destruction of the documents or ESI described in the legal hold until the hold has been removed by the entity that issued the hold.

4.2 Authority to Issue Legal Holds

4.2.1 Numerous situations arise where Government records and nonrecord material may be required for litigation, an administrative procedure, an audit or an investigation, or for response to Congressional and public inquiries. A legal hold may be issued by the following NASA entities:

- a. The Office of the General Counsel (OGC) may issue a legal hold for any documents or ESI within the Agency.
- b. The Office of the Chief Counsel (OCC) for any NASA Center may issue a legal hold for any documents or ESI stored at the Center for which that OCC has responsibility.
- c. The NASA or pertinent Center FOIA Officers may issue a notification of a records hold as required to meet FOIA requirements.
- d. The NASA OIG may issue legal holds in connection with OIG or Government Accountability Office (GAO) financial, performance, contract, or grant audits or in connection with an administrative or criminal investigation conducted by OIG.

4.3 Records and Other Documentary Materials Subject to Holds

4.3.1 Legal holds may be imposed on NASA programmatic and operational records, as well as nonrecord materials, in all media. In case of such holds, often those issuing the hold refer to all relevant information as "records" even though nonrecords are included in the hold.

4.4 Legal Holds Requirements

4.4.1 Entities or individuals receiving legal holds shall comply with the requirements of those legal holds, including guidelines concerning the scope and method of searching for, retaining, or providing materials in response to litigation- or investigation-related requests.

4.4.2 When NASA is required to implement a legal hold relating to discovery or other litigation-related purposes, the OGC or Center OCC shall coordinate with the appropriate Center Records

Manager, and the NASA Records Officer when multiple Centers are involved, to implement preservation and discovery protocols appropriate to the purpose for which the legal hold is instituted and consistent with applicable legal authority.

CHAPTER 5. Requirements for Management of Records in E-mail, Cloud, and Social Media

5.1 Determining Records in Electronic Formats or Media

5.1.1 Electronic content may constitute a Federal record if it meets the definition of records, regardless of whether it takes the form of an e-mail or other electronic communication such as a text or instant message, or if the content was created using social media applications internal and external to the Agency, including collaborative environments.

5.1.2 Content generated using communication or social media applications is likely a Federal record if there is an affirmative answer to one or more of the following non-exhaustive list of questions when considered in conjunction with the definition of Federal records:

- a. Does it contain unique evidence of the Agency's policies, business, or mission?
- b. Is the information available only on this social media site?
- c. Does the Agency use the tool to convey official Agency information?
- d. Is there a business need for maintenance of the information?

5.1.3 Employees may consult with their Center Records Manager when in doubt as to whether content constitutes record material. The default assumption is that the content does constitute record(s).

5.2 Managing Information in Cloud Computing

5.2.1 If NASA information/data processed or maintained via cloud services meets the definition of a Federal record, RM functionality is required in the cloud environment, or alternative plans are required for meeting established records requirements.

5.2.2 If the cloud is used only as space in which the Agency is storing data and performing functions with the data using non-cloud furnished capabilities, then RM functionality does not need to be addressed in the agreement. However, issues that should be addressed before entering into a cloud initiative agreement include such things as cloud environment security in compliance with NASA IT security policies and the destiny of any Agency data/records stored therein should the cloud provider cease operation.

5.2.3 NASA Service Executives establishing service-level agreements for cloud initiatives shall consult their Center Records Manager in considering whether an agreement should include records management requirements.

5.3 Managing Social Media Content

5.3.1 Social media should not be used external to the Agency for creation or posting of content that rises to the definition of Agency records unless, in consultation with the Center CIO, a plan is established for how the records will be harvested or captured and managed by the Agency in accordance with the NRRS.

5.3.2 When internal social media applications contain NASA records, application owners shall either provide RM functionality that provides the controls required by 36 CFR 1236 and the functionalities discussed in IT-HBK-1440.01, or establish written procedures that are approved by the Center Records Manager for how the records will be managed and disposed of in accordance with the NRRS.

5.4 Managing E-Communications Records

5.4.1 The content and metadata of e-mail messages created and used in the conduct of official Agency business are considered official Federal records if the information content meets the definition of Federal records as described in Section 1.1. See Table A for basic criteria to assist with determining which messages are records. There are many messages that may be sent or received by NASA employees that do not conduct Agency business and, therefore, are

nonrecords.

- a. Whether a message constitutes a record and; if so,
- b. Appropriate retention for the message before disposition.

Table A. Basic Criteria Determining E-mail Record Status and Retention

Basic Criteria for Determining Email Record Status and Retention				
<i>If e-mail message is:</i>	<i>NRRS Citation</i>	<i>Series Title</i>	<i>Disposition</i>	<i>How to Handle</i>
Strictly personal or non-business related		Non-record (personal or of a non-NASA nature)	Destroy Immediately or when no longer needed	Destroy at will or after 180 Days
Business related, but of little or no substantive value	1/78G	Transitory Files (minimal or no documentary or evidential value)	Destroy immediately or when no longer needed for reference, or under a predetermined schedule or business rule	Destroy after 180 Days
Related to employee's NASA function & not covered by another specific retention schedule	1/78F2	Administrative Records for NASA Function	Cut off at end of fiscal or calendar year. Destroy/delete 5 years after cutoff	Destroy 5 years after cutoff
Related to employee's NASA function e-mail content has its own schedule – See "Series Title" column.	Various Schedules	Whatever series governs records to which the content of the e-mail is related (e.g., Project Mgmt, Contract direction, etc.)	Varies, depending on the appropriate schedule item	Follow specific retention instructions
Business related and created or received by senior managers described in NRRS 1/22.A.1	1/22.A.1	Records of Top Management Officials (Administrator, Center Directors, deputies & associates who help execute the functions of the Administrator and Center Directors; and Heads of Agency or Center Mission Directorates or other direct mission support offices.)	Permanent	Transfer to NARA when 10 years old
Business related and created or received by heads of other offices as described in NRRS 1/22.A.2	1/22.A.2	Records of Top Management Officials (Heads of all other offices, e.g., functional offices concerned with Agency or Center infrastructure and administration, such as CIO, Chief Financial Officer (CFO), Human Capital, Facility Operations organizations, etc.)	Temporary	Cut off at end of fiscal or calendar year. Destroy/delete between 5 and 15 years after cutoff

5.4.2 Table A provides basic criteria to aid individuals and offices in determining the record status and retention of their messages. However, NRRS 1441.1 is always the authoritative source for determining retention.

5.4.3 NASA utilizes a type of "Capstone" approach to capture and manage e-mail records in accordance with NARA-issued Bulletin 2013-02. Using this approach, the Agency categorizes and schedules all e-mail of certain senior managers, based on the work and/or position of the e-mail account owner.

5.4.4 In NASA's implementation of this Capstone approach, the following are required:

a. Each Center Records Manager shall maintain an up-to-date list of senior managers whose e-mail records are permanent as described by NRRS 1/22.A.1 or NRRS 8/101 of NRRS 1441.A. With concurrence of the NASA Records Officer, updates to the senior management list are provided to the Agency e-mail service provider as Center personnel changes occur. The list may be found under "Electronic Records Management" on the internal [NASA Records Management Website](#).

b. The NASA CIO shall require the e-mail service provider to capture the e-mails and accompanying metadata of e-mail account holders specified as senior managers by Center Records Managers or the NASA Records Officer, so their records may be transferred to the National Archives.

5.4.5 The Agency has implemented a two-pronged approach for managing all other NASA users' e-mail records (with longer than 180-day retention) as follows:

a. The NASA CIO shall maintain an Agency-wide recordkeeping solution that automatically captures, manages and

disposes of e-mail records using the Capstone approach of position-based retention.

b. Individual users with nasa.gov e-mail accounts who have not been migrated to the Agency-wide solution will maintain, as described below, e-mail records of longer duration than transitory (180 day retention) value in accordance with the retention schedule appropriate to the subject and content of the message.

(1) Content and attachments of an e-mail record, together with date/time sent and distribution metadata, are to be captured by the individual user, and retained in the same system in which the user's related non-e-mail official records are stored or in systems/locations where their protection, retention, and recovery can be ensured. This is true whether the e-mail is associated with the user's individual account or a functional or other NASA business e-mail account for which the user is responsible (e.g., NASA-PAOfficer@nasa.gov).

(2) These messages may be captured and stored in Outlook Personal Storage Table (PST) files or Portable Document Format (PDF) files, as approved by the Center RM. PST files (personal folders) are located on a user's personal and/or network storage device that is regularly backed up. Include the word "Records" in the PST file name for any folder that contains e mail records. Messages are saved in PDF using "File-Save" or "File-Print" (select Adobe PDF as the printer) options from the e-mail. When saved as a PDF file, the user shall also ensure preservation of any attachment(s).

(3) Before an employee separates from the Agency, they should ensure any e-mail records of longer duration than transitory value are captured in one of the methods specified above. If e-mail records are stored in "Records" PST files, the departing employee will provide their organizational IT point of contact notice of that fact prior to their departure.

5.4.6 Employees shall not create or send a record using a non-NASA electronic messaging account (i.e., e-mail), unless the employee does one of the following: (1) copies the employee's official nasa.gov account or (2) forwards a complete copy of the record, with any attachment(s), to their official NASA account no later than 20 days after the original creation or transmission of the record. Employees may be subjected to disciplinary action for intentional violation of this provision. Nothing in this provision supersedes other NASA policies concerning use of non-NASA services for the processing of NASA information.

5.4.7 NASA business users shall not use instant messaging and text messaging services to create business communication records of Agency retention value greater than 180 days. In the event that communication of longer retention value is created, the sender and recipient have responsibility for capturing the content of and attachments to the message, together with date/time sent and distribution metadata, and saving it in the same system in which their related non-e-mail official records are stored or in systems/locations where their protection, retention, and recovery can be ensured.

Appendix A. Definitions

Active records. Records that are referred to on a frequent basis, i.e., daily or weekly, and are maintained in office files for immediate access, use, and reference. Also considered current records, which are **necessary** for conducting the business of an office.

Appraise, Appraisal. The process of determining the value and, thus, the disposition of records based upon their mission or business/administrative and other uses, their evidential and informational or research value, their arrangement, and their relationship to other records.

Authenticity. See Record Authenticity. Capstone. For purposes of NASA records management, an approach utilized by NASA Records Managers to capture and manage substantive e-mails by selecting the e-mails of certain managers, based on the work and/or position of the e-mail account owner.

Case file. A folder or other file unit containing materials relating to a specific action, transaction, event, person, place, project, or other subject. A case file may include many different individual records or groups of records that all relate to the case. For example: a contract file contains records on a specific contract, such as the solicitation, proposal, correspondence, addenda, reports, and processing information. Other types of case files include personnel actions, surveys, investigative files and studies.

Cloud computing. Technology that allows users to access and use shared data and computing services via the Internet or a Virtual Private Network. It gives users access to resources without having to build infrastructure to support these resources within their own environments or networks.

Cutoff. To break or end active use of records at regular intervals to facilitate continuous disposal, retirement, or transfer of the file/record series, i.e., monthly, yearly, five year blocks. Disposition instructions typically indicate how often the records are cut off and separated from active records.

Destroy. Physical destruction or complete deletion of records; any act which effectively obliterates the informational content of records, such as unauthorized removal of Government documents, tearing up, burning, pulping, erasure (tapes/diskettes/disks).

Disposition. Actions taken with regard to inactive records when they have fulfilled their retention schedule period. The actions include retirement to a records center for temporary storage, transfer to NARA, donation (with NARA approval) to an eligible repository, reproduction via digitization, and destruction. A records disposition may include two or more of these actions, such as retirement after one year to a records center, with retention for five years and then destroy when six years old.

Electronic Information System (EIS). Any electronic data/information system or application that allows creation, storage, or retrieval of electronic data or records. See also INFORMATION SYSTEM.

Electronic record. Record that is stored in a form that only a computer or computer-driven device can process (sometimes also called machine-readable).

Electronically Stored Information (ESI). Data that is created, altered, communicated, and stored in digital form.

Essential records. Information systems and applications, electronic and hardcopy documents, references, and records needed to support essential functions during a continuity event. The two basic categories of essential records are emergency operating records and rights and interest records. Emergency operating records are essential to the continued functioning or reconstitution of an organization. Rights and interest records are critical to carrying out an organization's essential legal and financial functions and vital to the protection of the legal and financial rights of individuals who are directly affected by that organization's activities. The term "vital records" refers to a specific sub-set of essential records relating to birth, death, and marriage documents.

Federal Records. See RECORDS.

Federal Records Center (FRC). A records storage facility operated by NARA for housing and servicing inactive and semi-active records of the Federal government.

File. (1) An accumulation of records maintained in a predetermined physical arrangement. (2) Storage equipment, such as a filing cabinet.

File plan. A detailed list or inventory of the individual files or file categories within a classification scheme. A file plan allows for the systematic identification, filing, and retrieval of records.

General Records Schedules (GRS). A comprehensive listing of records common to several or all Federal

agencies, together with retention schedules, issued by NARA and governing the disposition of specified recurring series of records.

Immutability. Unchanging over time or unable to be changed. Inactive records. Records that are no longer required or which are referred to so infrequently in the conduct of current business that they may be removed from the office and either retired to inactive records storage (e.g., an FRC or other approved storage space) or destroyed, depending on the approved disposition.

Information owner. Agency official or organizational unit responsible for the process to which the record information pertains and, thus, having statutory or operational authority for specified information and the responsibility for establishing requirements for controlling the information's generation, collection, processing, dissemination, and disposal. Same as RECORDS OWNER.

Information system. A discrete set of information resources organized for the creation/collection, processing, storage and maintenance, transmission, and dissemination of information, in accordance with defined procedures, whether automated or manual. See also ELECTRONIC INFORMATION SYSTEM.

Information system owner. The official responsible for the overall procurement, development, integration, modification, or operation and maintenance of an information system to meet requirements for managing the information it contains. The system owner may or may not be the same as the information owner.

Integrity. See Record Integrity.

Inventory. A systematic listing of all records series in an office or an agency generally including the location of each series, physical characteristics, and description of content.

Legal Hold. The procedure for identifying and ensuring the preservation of record and nonrecord materials, regardless of format, that might be or might become relevant to pending or potential litigation.

Long term retention. Long term refers to a period of retention which can be anywhere from 10 years to 60+ years. Also see RETENTION PERIOD. Metadata. Contextual information that describes the history, tracking, and/or management of an electronic document.

Nonrecord material. Those Federally owned informational materials that do not meet the statutory definition of records (44 U.S.C. §3301) or that have been excluded from coverage by the definition. Includes materials such as extra copies of documents and correspondence that are kept only for convenience or reference, stocks of publications and processed documents, personal records, reference items, and library or museum material intended solely for reference or exhibition. Also see RECORDS.

Office of record. An office designated as the official custodian of records for a specified program, activity, or transaction of an organization. Under functional or decentralized filing plans, the Office of Record or Office of Primary Responsibility (OPR) is usually the office which created the record or initiated the action on an incoming record, unless otherwise designated. Official files. An accumulation of official records, regardless of format, documenting an action or providing valuable information.

Permanent records. Records appraised by NARA as having enduring value because they document the organization and functions of the Agency that created or received them, and/or because they contain significant information on persons, things, problems, programs, projects, and conditions with which the Agency dealt. These records are valuable or unique in that they document the history of the Agency and generally record primary missions, functions, responsibilities, and significant experiences or accomplishments of the Agency.

Record Authenticity. An authentic record is one that can be proven to be what it purports to be, to have been created/sent by the person/entity purported to have created or sent it, and to have been created/sent at the time purported. Controls to assure authenticity will protect records against unauthorized addition, deletion, alteration, use, and concealment.

Record Integrity. The property of an electronic record that assures it is complete and unaltered.

Record Reliability. A reliable record is one whose contents can be trusted as a full and accurate representation of the transactions, activities or facts to which they attest and can be depended upon in the course of subsequent transactions or activities.

Record Usability. A usable record is one that can be located, retrieved, presented, and interpreted.

Records. All recorded information, regardless of physical form or characteristics, made or received by an agency of the U.S. Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational

value of the data contained therein. Machine readable materials include, but are not limited to, optical disk, magnetic tape, sound recordings, microforms, and any other such recording medium regardless of how produced. Also see NONRECORD MATERIAL.

Records center. (1) A facility for the economical storage and servicing of records pending their ultimate disposition. (2) An area or facility designated as a temporary staging area. Also see FEDERAL RECORDS CENTER.

Records custodian. A records custodian is an organization or individual designated by the Records Owner as having responsibility for physical and/or electronic storage and protection of records throughout their retention period. They may also have responsibility for records disposition, if so designated.

Records owner. SEE INFORMATION OWNER.

Records retention schedules. A document governing the NARA-approved mandatory retention period and authorized disposition of all records series of the Agency. Also known as a records schedule, records control schedule, records disposition schedule, retention schedule, or schedules. NASA's schedules are formally called NASA Records Retention Schedules (NRRS).

Reliability. See Record Reliability.

Retention period. The period of time that inactive records are required to be kept after cutoff or other external retention trigger (e.g., date of contract final payment) prior to their destruction.

Retirement. The movement of inactive records to a records center or some other authorized repository for storage until the expiration of their retention period.

Schedule. (1) Agency action to develop and obtain approval for a records retention schedule for a series of records. (2) An official agency action document listing the records series created by the agency. A schedule indicates whether each series of records is permanent or temporary and includes retention periods. Also see RECORDS RETENTION SCHEDULES.

Semi-active records. Records that are likely to be required only infrequently, e.g., not needed for day-to-day operations, in the conduct of current business. Semi-active records will normally be maintained in a records center or other offsite storage location pending their ultimate disposal. Also known as semi-current records.

Series. Files or information collections maintained as an aggregated set of individual records because they relate to a common subject or function, result from the same activity, or because of some other relationship arising out of their creation, receipt, or business use. All individual records within a Record Series are governed for retention/disposition purposes by the same Records Retention Schedule item. Sometimes known as a "record series."

Social media. Computer-based virtual communities and networks in which people interact in order to create, share, or exchange information, usually in an informal way. Common examples include wikis, blogs, social networks, photo libraries, virtual worlds, or video sharing sites.

System administrator. Person responsible for the maintenance, configuration, and reliable operation of computer hardware and information systems, including multi-user systems and file servers.

System owner. See INFORMATION SYSTEM OWNER.

Temporary records. Records approved by NARA via an authorized records schedule for disposal, either immediately after active use or after a specified trigger event or specified period of time after cutoff/retirement. An example of temporary records are Quality Management Review records that, in accordance with NRRS 1/Item 26.5B, may be destroyed when three years old or when no longer needed, whichever is sooner.

Transfer. (1) The movement of records from one owner to another. (2) The movement of records from Agency custody or ownership into the legal custody of NARA or other authorized repository.

Transitory records. A general term for those types of records that lose their value within a short period of time (180 days or less) and that should be separated during filing from records requiring longer retention or until the purpose for which it was created has been accomplished and the record can be destroyed. An example of a transitory record is a routine notification of an upcoming meeting, or a quasi-official notice such as an e-mail reminding an employee of the Combined Federal Campaign or Health Benefits Open Season. It may be destroyed at will.

Usability. See Record Usability.

Vital records. Specific sub-set of essential records relating to birth, death, and marriage documents.

Vital records manager. Individual designated by Center Directors and Director for Headquarters Operations to

facilitate management of essential and vital records.

Working papers. Documents such as rough notes, calculations, or drafts, assembled or created and used in the preparation or analysis of other documents.

Appendix B. Acronyms

AFS	Agency Filing Scheme
ARCIS	Archives and Records Centers Information System
CD	Compact Disc
CFR	Code of Federal Regulations
CIO	Chief Information Officer
COOP	Continuity of Operations
CUI/SBU	Controlled Unclassified Information/Sensitive But Unclassified
DOD	Department of Defense
DVD	Digital Video Disc
EIS	Electronic Information System
ERA	Electronic Records Archives
ESI	Electronically Stored Information
FOIA	Freedom of Information Act
FRC	Federal Records Center
GAO	Government Accountability Office
GRS	General Records Schedules
HBK	Handbook
HQ	Headquarters
IIF	Information in Identifiable Form
IPTA	Initial Privacy Threshold Analysis
ISO	International Organization for Standardization
IT	Information Technology
ITAR	International Traffic in Arms Regulations
ITS	Information Technology Security
JPL	Jet Propulsion Laboratory, a Federally Funded Research and Development Center
LOB	Line-of-Business
MRI	Master Records Index
NARA	National Archives and Records Administration
NASA	National Aeronautics and Space Administration
NF	NASA Form

NID	NASA Interim Directive
NODIS	NASA Online Directives Information System
NOMAD	NASA Operational Messaging and Directory Service
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
NRRS	NASA Records Retention Schedules
OCC	Office of Chief Counsel
OCIO	Office of the Chief Information Officer
OGC	Office of the General Counsel
OIG	Office of the Inspector General
OMG	Object Management Group
OPR	Office of Primary Responsibility
OMB	Office of Management and Budget
PCAT	Privacy and CUI Assessment Tool
PDF	Portable Document Format
PIA	Privacy Impact Assessment
PII	Personally Identifiable Information
PWS	Performance Work Statement
RLO	Records Liaison Officer
RM	Records Management
RMA	Records Management Application
SAO	Senior Agency Official
SF	Standard Form
SORN	System of Records Notice
SOW	Statement of Work
TR	Transfer Request (typically within ERA)
U.S.C.	United States Code
USB	Universal Serial Bus

Appendix C: Records Management Core Element Checklist

Records Management Core Elements/Services	Description of Core Elements/Services Capability
Record Creation/Identification	Will identify and distinguish "Record" data from "Nonrecord" data. Refer to "Record" definition.
Metadata	Captures information that describes the entity, contained in metadata element definitions, and divided into system metadata (defined by MoReq2010 [®]) and contextual metadata (defined by the supplier and/or the user).
Aggregation/Classification	Facilitates systematic identification and arrangement of business activities and/or records into categories according to logically structured conventions, methods, and procedural rules represented in a classification system. (Defined by ISO 15489 as classification.)
Authenticity/Reliability/Integrity	Ensures the following characteristics of records: <ul style="list-style-type: none"> • Authenticity -- the record is what it purports to be and was created by the person purported to have created it; • Reliability -- the information in the record is accurate and can be depended on; and • Integrity -- the record is complete and unaltered. (Defined in ISO 15489.)
Retention/Disposition	Includes mechanism to ensure Records are retained for period specified in NRRS and then disposed of when authorized by NRRS.
Legal Hold/Disposition Freeze	Allows a disposition freeze to be placed on a digital record and associated metadata - or, where applicable, an aggregation of records - in order to prevent any disposition action from taking place for the duration of the freeze.
Search and Reporting	Has capability to search for any entity type by any of its system or contextual metadata, including events.
Export/Interoperability	Permits extract of a record or record series with associated metadata in formats usable by an external repository and/or to directly transfer records from one system to another.
Record Event History/Audit Trail	Enables either metadata or audit trails to be kept as "complete and accurate representations of all transactions that occur in relation to a particular record" (ISO 15489-1:2001, 8.3.2) through all life-cycle phases.
Role Services	Employs roles and specific system permissions for all system users and groups/classifications of users.

Appendix D: Agency Filing Scheme (AFS)

This AFS is a listing of subjects of information that may be created by functional activities throughout NASA. Their corresponding numbers that appear in the first column have historically been used not only for numbering NASA policy documents, but also for filing of records and nonrecords in offices.

With the promulgation of almost entirely electronic records, the AFS will continue to be used for policy document numbering, but will also be useful as a metadata tag associated with records or data objects as they are created to serve as a search criteria element for location/retrieval of records.

PRIMARY SECONDARY AND TERTIARY AFS #	FILE SUBJECT/SERIES DESCRIPTION	
1000 - 1999	ORGANIZATION AND GENERAL ADMINISTRATION	
1000	General (e.g., NASA Strategic Plan)	
1010	Agency Establishment	
1011	Legislative Authority	
1012	Executive Authority	
1020	NASA Seal, Insignia, Logotype, Identifiers, Flags	
1022	Names, Symbols	
1030	Honors and Ceremonies (Acceptance)	
1040	Emergency Preparedness / Planning and Mobilization	
1041	Civil Defense	
1042	Emergency Warden Organization	
1043	Fallout and Fallout Shelter	
1044	Casualty Reporting	
1046	Mobilization Readiness	
1050	Agreements/Memoranda of Understanding	
1054	Foreign Governments	
1056	Non - Government	
1058		
1060	Consultants	
1070	History Program	
1080	Generate Knowledge	

1090	Communicate, Engage, Inspire Process	
1100	Organizational Structure	
1101	NASA Organization and Definition of Terms	
1102	HQ Institutional Program Office(s) and Enterprise Office(s) Organization	
1103	HQ Enterprise Office(s)	
1104	HQ Functional Office(s)	
1107	Center Organization (NASA Centers, Installations, and Component Facilities)	
1110		
1120	General Organization Responsibilities	
1130	Operating Relationships	
1140		
1150	Committees/Boards/Councils/Panels/Working Groups	
1152	Intra-Agency	
1154	Inter-Agency	
1156	Advisory Committees/Groups	
1160	Special Lines of Succession	
1162	Delegation of Authority To Act For The Administrator	
1170	Inventions and Contributions Board	
1180	NASA Board of Contract Appeals	
1190		
1200	Internal Management Controls	
1210	Fundamental Principles	
1216	Work Management	
1220	Role of General Management	
1230	Program Management	
1240	Functional Management	
1250	Institutional Management	
1260	Budget (Management of)	

1270	Productivity and Quality Enhancement - TQM	
1271	National Partnership for Reinventing Government	
1272	Government Performance Results Act (GPRA)	
1280	Quality Management Systems	
1290		
1300	External Relationships	
1305	Guest Operations	
1310	Legislative Branch	
1311	Congress	
1312	Government Accountability Office (GAO)	
1313	Government Printing Office (GPO)	
1314	Library of Congress	
1315	Judicial Branch	
1316	Supreme Court of the United States	
1320	Executive Branch	
1321	White House Referrals	
1322	Executive Office of the President (EOP)	
1323	Office of Management and Budget (OMB)	
1324	Office of Personnel Management (OPM)	
1325	Executive Agencies/ Departments	
1328	Department of Defense	
1330	Independent Establishments and Government Corporations	
1340	State and Local Government	
1350	Nongovernmental Organizations	
1355	University Affairs	
1356	General NASA University Policy and Relationships	
1357	Unsolicited Proposals from Universities	
1358	Functional Management of University Programs	
1359	University R&D Support	

1360	International Affairs/Programs	
1362	Cooperative Projects	
1365	International Organizations	
1367	Support of Overseas Operations	
1370	Foreign Visits and Visitors	
1371	Foreign Nationals Access to NASA	
1373	NASA Travel Abroad	
1374	International Internships, Fellows & Scholars	
1376	Foreign Visiting Researchers	
1378	Training of Foreign Nationals	
1380	Public Affairs	
1382	Control and Release of Information	
1383	Audio Visual News Material	
1384	Public Appearances	
1385	Speeches and Speakers	
1387	Exhibits	
1389	Conferences	
1390	Education Programs General	
1392	Educational Programs	
1394	Educational Services	
1395	Foreign Government Awards	
1400	Administrative Management Programs	
1410	Directives Management	
1412	Office of the Federal Register	
1415	Reports Management	
1417	Information Collection, Assessment and Clearance Management (Paperwork Reduction Act)	
1420	Forms Management	
1430	Visual Aids Management	
1440	Records Management	

1441	Records Disposition	
1442	Files Maintenance	
1450	Correspondence Management	
1451	Executive Instructions on Correspondence	
1460	Mail Management	
1470	Management Improvement	
1472	Work Measurement & Simplification	
1480	Publications Management	
1490	Printing Management	
1500	Administrative Services	
1510		
1520	Graphics	
1521	Visual Aids	
1530	Postal Records	
1540	Building and Grounds Management	
1541	Transportation and Parking Services	
1542	Conference Rooms and Auditoriums	
1550	General Office Services	
1551	Internal Mail/Messenger Service	
1552	Clerical and Stenographic	
1553	Moving and Labor	
1560		
1570	Office Supplies	
1571	Office Equipment and Furnishings	
1580	Telephone (Local)	
1590	Miscellaneous Matters	
1600	Security	
1610	Personnel Security	
1620	Physical Security	

1630	Control of Classified Information	
1640	Security Classifications	
1650	Industrial Security	
1660		
1670	Security Education	
1680	Visitor and Foreign Travel Control	
1690	Security Surveys	
1700	Safety	
1701	Basic Policy	
1710	Safety/Accident Prevention	
1711	Accident Reporting & Investigation	
1712	Injury Reporting	
1720	Accident/Mishap Reporting	
1730	Protective Clothing and Equipment	
1740	Safety Standards	
1800	Occupational Health	
1810	Professional Medical Services	
1812	Medicines	
1814	Clinical Facilities	
1815	Narcotics and Drugs	
1820	Preventive Medicine	
1830	Physical Fitness	
1840	Industrial Hygiene	
1845	Health Standards	
1846	Toxicology	
1847	Advisory Center on Toxicology	
1850	Space Medicine	
1860	Radiological Health	
1870	Environmental Sanitation	

1880	Entomology	
1890	Disaster Medical Planning	
1900	Standards of Conduct	
1910	Ethics	
2000-2999	LEGAL AND TECHNICAL	
2000	Laws And Legal Matters	
2001	General	
2010	Litigation: Courts	
2011	United States District Court	
2012	United States Court of Federal Claims	
2013	United States Court of Appeals for the Federal Circuit	
2014	Other Federal Courts	
2015	State Courts	
2020	Litigation: Administrative Proceedings	
2021	Comptroller General Cases	
2022	Board of Contract Appeals Cases	
2025	Alternative Dispute Resolution	
2026	Protests: Agency and Contracting Officer	
2030	Litigation: Procedural Matters	
2031	Subpoenas	
2032	Expert Witness	
2033	Depositions	
2040	Taxes, Customs, and Duties	
2050	Courts, Boards, and Arbitration Procedures and Rules	
2060	Statutes and Legislation	
2070	Legal Opinion / Advice Files	
2080	Claims	
2081	Equal Opportunity Compliance	
2082	Tort Claims	

2083	Employee Personal Property Claims	
2084	Contract Claims	
2085		
2086	False or Fraud Claims	
2087	Debt Claims	
2088	Garnishments	
2090	Intellectual Property	
2091	Inventions Made by Government Employee	
2092	Royalties Received by NASA	
2100	Technology Utilization (including Small Business Innovative Research (SBIR))	
2110	Programs and Policies	
2120	Flash Sheets	
2121	Appraisal and Evaluating	
2130	Tech Briefs	
2131	Tech Briefs Distribution	
2140	Patent Statements	
2150	Reporting Industrial Applications	
2160	Information and Application Centers	
2170	New Technology Management	
2180	Technology Transfer	
2190	Export Control	
2200	Scientific and Technical Information	
2210	External Release of NASA Software	
2220	Publications Program / STI Databases	
2230		
2240	Library Program Activities	
2300	Management Information Systems	
2305	General Policies and Procedures	
2310	Information Resources Management	

2314	Documentation Management Systems	
2320	Presentations and Reviews (Management)	
2330	Planning and Scheduling Systems	
2332	NASA PERT and Companion Cost	
2334	Line of Balance	
2336	Milestone Systems	
2340	Project Status Reporting	
2400	AUTOMATIC DATA PROCESSING (ADP) MANAGEMENT	
2410	Policies and Procedures	
2415	Computer Program Documentation	
2420	Data Reduction and Interpretation	
2430	Equipment Utilization and Control	
2440	Data Display	
2450	Personnel Management	
2500	Communications	
2510	General	
2520	NASA Communications System	
2530	Telecommunications and Messages	
2540	Administrative Communications	
2550	Cryptography	
2570	Radio Frequency Management	
2600	Photographic Services Management	
2610	Equipment, Supplies, and Attachments	
2620	Photographic Instrumentation	
2630	Photography Services	
2640	Projectors and Operator Services	
2700		
2800	Information Technology (IT) Management	
2810	IT Security	

2820	NASA Software Policies	
2830	NASA Enterprise Architecture	
2840	IT Outsourcing / Insourcing	
2850	Information Technology (IT) Services	
2851	Web Services	
2852	Cloud / Data Center Services	
2853	End User Services (EUS)	
2854	Enterprise Applications	
2855	Service Desk Services	
2856	Communications Technology Services	
2900		
3000-3999	HUMAN RESOURCES / PERSONNEL	
3000	Human Resources/Personnel (General)	
3050	Equal Opportunity	
3100	Executive Human Resources Management (Senior Executive Service (SES))	
3200	Personnel Provisions (General)	
3210	Basic Concepts and Definitions	
3211	Veteran's Preference	
3212	Competitive Service and Status	
3213	Excepted Service	
3230	Organization of the Government for Personnel Management	
3250	Personnel Management in Agencies	
3260		
3270	Direction and Control of the Personnel Program	
3271	Developing Policies, Procedures, Program, and Standards	
3272	Personnel Policy Formulation and Personnel Issuances	
3273	Inspections, Surveys, and Audits	
3274	Corrective Actions	
3275	Evaluation of Personnel Programs	

3280	Military Personnel	
3290	Personnel Records and Processing	
3291	Personnel Reports	
3292	Development of Personnel Statistics	
3293	Personnel Records and Files	
3294	Release of Personnel Information	
3295	Personnel Forms and Documents	
3296	Processing Personnel Actions	
3300	Employment (General)	
3301	Overseas Employment	
3302	Employment in the Excepted Services	
3303	Military Service Obligation and Draft Deferment	
3304	Employment of Experts and Consultants	
3305	Dual Employment and Dual Compensation	
3306	Personal Service Contracts	
3307	Detainees	
3310	Authority for and Tenure of Employment	
3311	Power of Appointment and Removal	
3312	Position Control	
3315	Career and Career-Conditional Employment	
3316	Temporary and Indefinite Employment	
3317	Senior Executive Service Career Appointee Merit Staffing	
3319	Management of Senior Scientific and Technical and Other Senior Level Positions	
3320		
3330	Recruitment, Selection, and Placement	
3331	Organization for Recruitment and Examining	
3332	Recruitment and Selection Through Competitive Examination	
3333	Recruitment and Selection for Temporary and Term Appointment	

3334	Personnel Mobility Agreements Under Title IV of the Intergovernmental Personnel Act (IPA) of 1970	
3335	Promotion and Internal Placement	
3337	Examining System	
3338	Qualification Requirements - General	
3339	Qualification Requirements - Medical	
3340	Transfers	
3350	Job Retention	
3351	Reduction in Force (RIF)	
3352	Reemployment Rights	
3353	Restoration after Military Duty	
3400	Employee Performance and Utilization	
3410	Employee Development (Training)	
3420		
3430	Performance Evaluation (Appraisals)	
3440		
3450	Employee Recognition and Incentives	
3451	Incentive Awards	
3452	Suggestion System	
3500	Position Classification, Pay, and Allowances	
3510	Position Classification and Job Evaluation	
3511	Position Classification Under the Classification Act System	
3512	Job Evaluation Under Prevailing Rate System	
3513	Employee Classification Appeals	
3515	Classification - Excepted Positions	
3520		
3530	Pay Rates and Systems (General)	
3531	Pay Under the Classification Act System	
3532	Pay Under Prevailing Rate System	
3534	Pay Under Other Systems	

3537	Critical Position Pay Authority	
3539	Conversions Between Pay Systems	
3540		
3550	Pay Administration (General)	
3553	Waiver of Pay/Retirement Reduction for Military or Civilian Retirees	
3560		
3570		
3571	Travel and Transportation for Recruitment	
3580		
3590	Allowances and Differentials	
3591	Allowances and Differentials Payable in Non-Foreign Areas	
3592	Overseas Allowances and Post Differentials	
3593	Subsistence, Quarters, and Laundry	
3594	Allowances for Uniforms	
3600	Time and Attendance	
3610	Hours of Duty	
3620		
3630	Absence and Leave	
3700	Personnel Relations and Services	
3710	Personnel Relations	
3711	Employee Management Relations	
3712	Employee Organization and Activities	
3713	Nondiscrimination	
3715	Nondisciplinary Separations, Demotions and Furloughs	
3720		
3730	Suitability and Conduct	
3731	Suitability	
3733	Political Activities of Federal Employees	
3734	Holding State or Local Office	

3735	Employee Responsibilities and Conduct	
3736	Employee Investigations	
3740		
3750	Discipline and Adverse Actions	
3751	Discipline	
3752	Adverse Actions	
3760		
3770	Remedies	
3771	Employee Grievances and Administrative Appeal	
3772	Appeals to the Commission	
3780		
3790	Services to Employees (General)	
3792	Employee Assistance Program	
3800	Insurance and Annuities	
3810	Injury Compensation	
3820		
3830	Retirement and Social Security	
3831	Retirement	
3832		
3840		
3850	Unemployment Compensation	
3860		
3870	Group Life Insurance	
3880		
3890	Group Health Insurance	
3900	General and Miscellaneous	
3910		
3920		
3930	Programs for Specific Positions and Examinations	

3933	Qualification Requirements for Specific Positions	
3938	Classification and Pay for Specific Positions	
3940	Charity Drives, Contributions, and Solicitations	
3950	Credit Unions and Banking Facilities	
3960		
3970	Space Flight Participants	
4000-4999	PROPERTY AND SUPPLY	
4000	Property and Supply (General)	
4010	Government Property Responsibility	
4020	Property Surveys -- Lost, Damaged, and Destroyed	
4030	Workload and Planning	
4040	Supply Sampling	
4050	Sources of Supply	
4060	Returnable Containers	
4100	Inventory Management (General)	
4110	Criteria for Inventory	
4120	Management of Stores Stock	
4130	Physical Inventory	
4200	Equipment Management (General)	
4210	Property Accountability and Controls	
4220	Use and Replacement Standards for Office Furniture/Furnishings	
4300	Utilization and Disposal	
4310	Utilization and Excess	
4320	Disposal of Surplus and Personal Property	
4330		
4340	Disposal of Property at Foreign Offices	
4350	Exchange and Sale of Property	
4360	Reporting of Excess and Surplus Property	
4370	Cannibalization of Equipment	

4380		
4390		
4400	Supply Cataloging	
4410	Maintenance of Federal Cataloging	
4420	Provisioning Screening Procedures	
4430	Local Stock Lists	
4500	Storage and Distribution	
4510	Storage Standards and Criteria	
4520	Receiving and Inspection Processes	
4530	Distribution Processes	
4600	Expanded Supply Control	
4610	On-Site Working Stores	
4700		
4800		
4900		
5000-5999	PROCUREMENT/SMALL BUSINESS /INDUSTRIAL RELATIONS	
5000	Procurement/Small Business/Industrial Relations (General)	
5100	Procurement (Contracts) - General	
5101	Federal Acquisition Regulations (FAR) Systems	
5102	Definitions of Words and Terms	
5103	Improper Business Practices and Personal Conflicts of Interest	
5104	Administrative Matters	
5105	Publicizing Contract Actions	
5106	Competition Requirements	
5107	Acquisition Planning	
5108	Required Sources of Supplies and Services	
5109	Contractor Qualifications	
5110	Market Research	
5111	Describing Agency Needs	

5112	Acquisition of Commercial Items	
5113	Simplified Acquisition Procedures	
5114	Sealed Bidding	
5115	Contracting by Negotiation	
5116	Types of Contracts	
5117	Special Contracting Methods	
5118	[Reserved per FAR]	
5119	Small Business Programs	
5120	[Reserved per FAR]	
5121	[Reserved per FAR]	
5122	Application of Labor Laws to Government Acquisitions	
5123	Environment, Conservation, Occupational Safety, and Drug-Free Workplace	
5124	Protection of Privacy and Freedom of Information	
5125	Foreign Acquisition	
5126	Other Socioeconomic Programs	
5127	Patents, Data, and Copyrights	
5128	Bonds and Insurance	
5129	Taxes	
5130	Cost Accounting Standards Administration	
5131	Contract Cost Principles and Procedures	
5132	Contract Financing	
5133	Protests, Disputes, and Appeals	
5134	Major System Acquisition	
5135	Research and Development Contracting	
5136	Construction and Architect-Engineer Contracts	
5137	Service Contracting	
5138	Federal Supply Schedule Contracting	
5139	Acquisition of Information Technology	
5140	[Reserved per FAR]	

5141	Acquisition of Utility Services	
5142	Contract Administration and Audit Services	
5143	Contract Modifications	
5144	Subcontracting Policies and Procedures	
5145	Government Property	
5146	Quality Assurance	
5147	Transportation	
5148	Value Engineering	
5149	Termination of Contracts	
5150	Extraordinary Contractual Actions	
5151	Use of Government Sources by Contractors	
5152	Solicitation Provisions and Contract Clauses	
5153	Forms	
5160		
5170		
5171	Mid-Range Procurement Procedures	
5172	Acquisition of Investigations	
5180		
5190		
5200	Contractor Labor Relations	
5210	Labor Relations Boards	
5220	Disputes, Strikes, and Work Stoppages	
5300	Reliability and Quality Assurance	
5310	General Provisions	
5311	NASA-DOD Relationships	
5320	Reliability Policies and Programs	
5330	Quality Policies and Programs	
5340	Contamination Control	
5400	Contractor-Held Government Property	

5500	Patent Waiver	
5600	Statement of Work	
5610	Work Breakdown Structure	
5700	Awards, Inventions, and Contributions	
5800	Grants and Cooperative Agreements	
5900	Contractor Financial Management and Reporting	
6000-6999	TRANSPORTATION	
6000	Transportation (General)	
6010	Definition of Terms	
6020	Transportation Officers	
6021		
6022	Appointment and Responsibilities	
6030	Transportation Planning	
6040	Relationships with Other Government Agencies	
6041	Participation before Regulatory Agencies	
6050	Transportation Publications, Records, and Reports	
6051	Preparation of Government Bills of Lading	
6100	Commercial Freight Services	
6110	Freight Rates, Charges and Classification	
6120	Freight Traffic Negotiations	
6130	Carrier and Mode Selection	
6140	Accessorial Transportation Services	
6200	Traffic Management Programs	
6210	Procurement Traffic Management	
6220	Loss and Damage in Transit	
6300	Transportation of Unusual or Hazardous Cargo	
6310	Export Traffic	
6320	Import Traffic	
6330	Explosives and Other Dangerous Articles	

6340	Oversize and Overweight Cargo	
6350	Classified Cargo	
6400	Preparation and Handling of Cargo	
6410	Preservation, Packaging, and Packing Supplies and Equipment	
6420	Loading, Blocking and Bracing	
6430	Operation and Maintenance of Materials Handling Equipment	
6500	Special Airlift Services	
6600	Transportation and Transport Engineering	
6610	Movement of Large Launch Vehicles	
6620	NASA Transportability	
6700	Motor Vehicle Operation and Management	
6710	NASA Motor Vehicle Program	
6720	Vehicle Authorization and Acquisitions	
6730	Vehicle Operations and Control	
6740	Vehicle Maintenance and Motor Pools	
6750	Vehicle Accidents	
6752	Lost, Damaged, and Destroyed Vehicles	
6760	Vehicle Marking and Identification	
6770	Leased and Rented Vehicles	
6780	Automotive Equipment	
6790		
6800	Passenger Transportation	
6810	Local Passenger Service	
6900		
7000-7999	PROGRAM FORMULATION	
7000	Program Formulation General	
7010	Agency Program Goals and Objectives	
7020	Long-Range Planning	
7030	Intermediate-Range Planning	

7040	Program Planning and Review	
7050	Low Cost Systems Program	
7060	Program and Project Logistics Policy	
7100	Research and Development Planning and Approval	
7110	Advanced Studies Planning and Approval	
7120	Project Planning and Approval	
7121	Phased Project Planning and Approval	
7122	Other Project Planning and Approval	
7123	Systems Engineering	
7130	Supporting Research and Technology Planning and Approval	
7140	University Program	
7150	Project Scheduling and Implementation	
7160	Project Termination	
7170	Human Research	
7200	Institutional Planning and Approval	
7210	Establishment of Agency Institutional Goals and Objectives	
7220	Establishment of Center Institutional Goals and Objectives	
7230	Institutional Planning - Center Development	
7231	Human Resources Planning and Plans	
7232	Facility Master Planning and Plans	
7233	Center Technical Capability Planning and Plans	
7234	Center Institutional Capability Planning and Plans	
7235	Site Selection	
7400	Approval and Management of Financial Reports for Contracts and Grants	
7500	Commercialization (of NASA Technology and Systems)	
7600	Program Operating Plans	
7610	General Policies and Procedures	
7620	Research and Program Management	
7630	Research and Development	

7640	Construction of Facilities	
7700	Human Resources Utilization	
7710	General	
7720	Determination of Human Resources Requirements	
7730	Personnel Complement Ceilings and Controls	
7740	Human Resources Utilization Programs and Reports	
7800	Reserved	
7900	Aircraft Operations and Management	
7910	Aircraft Operations Management	
7920	Administrative Aircraft Management	
8000-8999	PROGRAM MANAGEMENT	
8000	Program Management - General	
8005	Major Flight and Development	
8010	Major Flight and Development - General	
8020	Program Control	
8030	Flight Experiments and Tasks	
8040	Configuration Control	
8050	Systems Integration and Checkout	
8060	Systems Design	
8070	Technical Standards and Specifications	
8071	Structures, Mechanical, and Thermal	
8072	Materials and Processes	
8073	Power and Electrical	
8074	Communication/Data Handling/Information Systems	
8075	Electronics and Avionics	
8076	Fluids, Propulsion	
8077	Systems, Integration, Analysis and Test	
8078	Human Factors	
8079	Ground and Flight Operations	

8080	Tests and Testing	
8090	NASA Engineering Standards	
8100	Advanced Studies	
8110	General	
8120	Conduct of Studies	
8130	Study Reports	
8132	In-House Reports	
8134	Contractor Study Reports	
8200	Supporting Research and Technology (SRT)	
8210	General	
8220	Conduct of SRT	
8230	Coordination and Dissemination	
8300	Grants and Research Contracts	
8310	General	
8320	University Programs	
8330	Evaluation of Proposals	
8340	Termination	
8400	Tracking and Data Acquisition - General	
8410	Tracking Stations	
8420	Network Spaceflight Tracking and Data Network (STDN)	
8430	Mission Records	
8440	Balloons and Sounding Rockets	
8450	System Records	
8500	Environmental Management (General)	
8510	External Activities	
8520	Budget	
8530	Environmental Media	
8540	Pollution Prevention	
8550	Compliance	

8560	Restoration / Remediation	
8570	Conservation	
8580	National Environmental Policy Act (NEPA)	
8590	Management and Information Systems	
8600	Operations	
8610	Operations General	
8620	Mission Reports	
8621	Mission Failure and Investigations and Reports	
8630	Launch Operations	
8631	Launch Scheduling	
8700	Safety and Mission Assurance	
8710	Safety and Mission Assurance Policy (General) (S&MA)	
8715	Occupational Safety and Health Program Application (OSHA)	
8720	Reliability, Availability, and Maintainability Policy	
8730	Quality Management	
8740		
8750	Software Management Assurance Policy	
8800	Real Property and Facilities	
8810	Land and Improvements	
8811	Acquisition	
8812	Utilization and Management	
8813	Transfer of / Disposal	
8814	Housing and Personnel Quarters	
8820	Construction of Facilities (C of F)	
8821	General	
8822	Criteria and Standards	
8823	Design and Engineering	
8824	Cost Estimation	
8825	Inspection, Supervision, and Acceptance	

8826	Major Construction	
8827	Minor Construction	
8828	Alterations and Repairs	
8830	Maintenance, Repair, and Operation of Facilities	
8831	General	
8832	Criteria and Standards	
8833	Inspections	
8834	Structure and Equipment	
8835	Grounds and Appurtenances	
8836	Utility Systems	
8837	Refuse Collections and Disposal	
8838	Fire Protection and Fire Fighting	
8839	Plant Support Services	
8840		
8850	Logistics	
8900	Program Medical Support	
8910	Care and Use of Animals	
9000-9799	FINANCIAL MANAGEMENT	
9000	Principles and General Policies	
9010	NASA Financial Management Requirements	
9020	Reserved	
9030	Reserved	
9040	Appropriated Funds	
9050	Cash Management & Administrative Control of Appropriations and Funds	
9060	Accrual Accounting	
9070	Working Capital Funds	
9080	User Charges and Rental Charges	
9090	Reimbursable Agreements	
9095	Reserved	

9100	Budget and Financial Management and Budgeting Systems	
9110	Reserved	
9120	Reserved	
9130	Reserved	
9140	Reserved	
9200	Accounting	
9210	Accounting Principles	
9220	General Ledger Accounting	
9230	Reserved	
9240	Cost Accounting	
9250	Property Accounting	
9260	Liability Accounting	
9270	Reserved	
9280	Expenditure Accounting	
9290	Miscellaneous Accounting	
9300	Financial Reports	
9310	Agency Reports	
9320	External Reports - Accounting	
9330	External Reports - Budget	
9340	Reserved	
9350	Center Reports	
9360	Reserved	
9370	Reserved	
9380	Reserved	
9390	Reserved	
9400	Budget Formulation and Execution	
9410	Planning, Programming, Budgeting, and Execution - General	
9420	Budget Formulation	
9421	Budget Call-Instructions and Guidelines	

9422	Preparation and Submission of Estimates	
9423	Headquarters Review and Approval	
9430	Formulation of Annual Appropriation and Authorization Languages	
9440	President's Budget	
9441	Budget Call	
9442	Preparation and Submission of Estimates	
9443	Headquarters Review and Approval	
9444	External Agency Review and Approval	
9450	Congressional Budget	
9451	Budget Call	
9452	Preparation and Submission of Material	
9453	Headquarters Review and Approval	
9454	Preparation and Submission of Congressional Budget	
9460	Conduct of NASA Participation in Congressional Hearings (on Budget)	
9470	Budget Execution	
9480	Reserved	
9490	Reserved	
9500	Contractor Financial Management Reporting System	
9600	Fiscal Operations	
9610	Accounts Receivable , Billing, and Collections	
9620	Payroll	
9630	Accounts Payable and Disbursements	
9640	Claims	
9645	Erroneous Payment of Salaries and Wages	
9650	Reserved	
9660	Essential/Vital Records and Emergency Transactions	
9670	Reserved	
9680	Grants Financial Management	
9690	Investments	

9700	NASA Travel Regulations	
9710	General Provisions	
9720	Travel Under Special Circumstances	
9730	Travel Cards	
9740	Travel Provisions for Non-employees	
9750	Extended Temporary Duty Travel (ETDY) Allowance	
9760	Relocation Allowance	
9770	Conferences Attendance and Reporting	
9780	Payment of Expenses Connected With the Death of Certain Employees	
9790	Payment of Travel Expenses for Non-Federal Source	
9800-9999	INSPECTOR GENERAL FILES - AUDITS AND INVESTIGATIONS	
9800	Investigations Program	
9810	NASA Investigations Program	
9820	General Policies and Responsibilities	
9830	Investigative Procedures	
9840	Reports of Investigations	
9850		
9860	Types of Cases, Elements and Proof Needed	
9870	Testifying in Judicial or Administrative Proceedings	
9880	Computer Crimes	
9890	Inspections and Assessments Files	
9900	Audit Program	
9910	NASA Audit Program	
9920	Audit Standards	
9930	Audit Planning	
9940	Audit Performance (Conducting an Audit)	
9950	Audit Reporting	
9960	Audits of Contractors and Grantees	
9970		

9980	Special Audit Programs	
9990	Miscellaneous Audit Topics	

Appendix E. NASA Records Retention Schedules Update Procedures

E.1 Occasionally, the creation of new record types, changes in the nature of records, or changes in NASA business requirements for retention of sets of records necessitate creation of a new retention schedule item, or revision of an existing one.

E.2 When situations like this arise, owners or custodians of the records in question should coordinate with their Center Records Manager to propose new/revised schedules as quickly as possible and as often as necessary in order to ensure all NASA records are scheduled.

E.3 To facilitate the timely updating of the NRRS, a process of submitting and reviewing proposed schedules is provided in this document. The steps below describe this process and identify the actions for each step. After a proposed schedule is approved, an update entry will be made to NRRS 1441.1, including an entry in the Change History log. The NASA Records Officer will then notify all Center Records Managers and the change requesting office of the approval and NRRS update.

E.4 NRRS Change Proposal Process

E.4.1 This process should be followed when a record or records series cannot be identified in either NRRS 1441.1, as revised, or the NARA GRS. Records of this nature are considered "unscheduled." Unscheduled records stay in this state until a schedule approval from NARA is granted. Unscheduled records are managed as though "Permanent," meaning they cannot be destroyed until NARA has appraised them and/or a new schedule has been established.

E.4.2 When the Record Owner determines that a type of record, or series of records, either does not exist in the NRRS or needs modification, the Record Owner is to contact the NASA Center Records Manager to help develop a proposed schedule for the records. The RM will appraise the records and assist the Record Owner in drafting a new schedule following an existing one as a model. No one knows records better than the people who create and/or work with them. Thus, the owner's lead in providing input is imperative.

E.4.3 If a new schedule is being proposed, it should be formatted the same as existing schedules, with a description of the nature of the records explaining what they are and how they are used. Proposed retentions should also be indicated as either "permanent," if they are of a historically significant nature, or "temporary."

E.4.4 If a new temporary item is added, the retention should be based on the Agency's business need or regulatory requirements for the records. Do they need to be retained for a set amount of time to meet regulatory requirements (such as from EPA)? Or do they need to be retained for a period during which an audit is feasible? If there are no external drivers of a retention period, the owner is free to determine how long the office will have need of them for the purposes they are being held.

E.4.5 If an existing schedule with modifications could better fit the records, a revision may be proposed. Likewise, if there is need to retain records longer than the current schedule, or a subset of records needs to be called out for a shorter retention, a schedule revision may be more appropriate. In any of these cases, the Records Owner may copy an existing schedule item from the NRRS and "redline" it.

E.4.6 If the schedule is for records of a function spanning the entire Agency, it would be ideal to coordinate the records description(s) and retention(s) with the entire community.

E.4.7 A written justification of why the new or revised schedule is needed should be provided by the applicable Center Records Manager, together with the proposed schedule item(s), to the NASA Records Officer. The justification may be as simple as, "These records are unscheduled."

E.4.8 All proposed changes and recommendations may be submitted by the Center Records Manager (or with the Center Records Manager copied) via e-mail to the NASA Records Officer, NASA Headquarters.

E.4.9 Each Center may have its own supplemental procedures for developing proposed schedules, but the procedure(s) should at least follow the steps in the table below.

Step	Action Officer	Action
1	Record Owner	Verify with the Center Records Manager and NASA Records Officer that no schedule exists to cover the records.

2	Record Owner	<p>Coordinate with Center Records Manager to either revise an existing schedule or create a new schedule. This includes determining the functions and activities documented by the records to be scheduled, developing an inventory of the records, including a description of the records, informational content, their use, medium, location, volume, and inclusive dates.</p> <p>In addition, evaluate the period of time the Agency requires use of each specific record series or system by reference to its uses and value to operations or legal obligations. Based on Agency needs, formulate specific recommended disposition instructions for each record series or each part of an automated information system. Include cutoff instructions, retention periods, including length of time to retain onsite, instructions for retirement of records to inactive storage, if appropriate, and retention period before destruction of temporary records or transfer of permanent records to the National Archives. Recommend retention periods taking into account the rights of the Government and the rights of those directly affected by Agency actions.</p>
3	Record Owner	Submit Draft schedule and justification to the Center Records Manager for review and approval.
4	Center Records Manager	Review submittal. This review includes coordinating all proposed changes with other officials and offices creating and maintaining similar records at the Center.
5	Center Records Manager	If neither an NRRS nor GRS schedule exists for Agency needs, coordinate a review of the proposed change to the NRRS by the Center Office of Chief Counsel.
6	Center Records Manager	If the proposal is disapproved, the Center Records Manager notifies the Record Owner and works with the Record Owner to correct the problem.
7	Center Records Manager	If the proposal is approved at the Center level, forward the proposed schedule and any attachments to the other Center Records Manager(s) for review and comments (2-3 week review period).
8	Other RM(s)	Each Center Records Manager should determine if the records described in the proposal are applicable to that Center. If they are, that RM should have the appropriate Center organization review and provide comment on the proposal.
9	Originating Center Records Manager	Consolidate all Center comments into one response with Centers noted and send to the NASA Records Officer with the resultant proposed schedule and attachments. If a Center has no comments, a "no comments" notice will be included in the package.
10	NASA Records Officer	Review the proposal, making any modifications needed based on current NARA and/or Government Accounting Office general guidance.
11	NASA Records Officer	Send the revised schedule, with attachments, to the Office of NASA General Counsel for review and concurrence.
12	Office of the General Counsel	Review proposed schedule and submit comments to the NASA Records Officer. If the General Counsel has no comments, a concurrence with "no comments" reply should be sent to the NASA Records Officer.
13	NASA Records Officer	Disposition comments, if any. Then, finalize and enter the schedule into ERA for NARA's review and approval.

14	NARA	Review the proposed schedule and either approve or disapprove it.
15	NASA Records Officer	If NARA disapproves the proposed schedule, work with NARA and the submitting Center to make necessary modifications to obtain NARA approval. Coordinate any additional NASA reviews required because of the changes.
16	NASA Records Officer	Upon NARA approval of the proposed schedule, enter the approved retention in the NRRS and publish the updated NRRS in NODIS. Provide notice of NARA approval to all Center Records Managers. Update the NRRS Change History page accordingly.
17	Center Records Manager	Upon notification of a NARA-approved retention schedule, provide appropriate Center notification(s), e.g., to Center RLOs and custodians, of the changes to the NRRS.

Appendix F. Unauthorized Records Destruction Reporting Guidance

Reporting Intentional or Accidental Unauthorized Destruction of Records (Report to be submitted through the NASA Records Officer.)

F.1 Text quoted from 36 CFR 1228.104 Reporting.

a. The head of a Federal agency shall report any unlawful or accidental destruction, defacing, alteration, or removal of records in the custody of that agency to NARA (NWML), 8601 Adelphi Rd., College Park, MD 20740-6001. The report shall include:

- (1) A complete description of the records with volume and dates, if known;
- (2) The office of origin;
- (3) A statement of the exact circumstances surrounding the alienation, defacing, or destruction of the records;
- (4) A statement of the safeguards established to prevent further loss of documentation; and
- (5) When appropriate, details of the actions taken to salvage, retrieve, or reconstruct the records.

F.2 Survey for Gathering Information for Report of Unauthorized Destruction.

F.2.1 Information to be gathered for a complete description of the records:

- a. In what media do the records exist?
- b. What is the volume of the subject records?
- c. What records series from the NASA Records Retention Schedules (NRRS) describes them?
- d. From what function do they result? How are they used?
- e. What is the date range of the records?
- f. What is the NRRS-prescribed disposition date for the record?

F.2.2 What is the office of origin for the records? Give hierarchical line of the organization -- office, division, directorate/program/project, NASA Center.

F.2.3 Provide a statement of the exact circumstances surrounding the alienation, defacing, or destruction of the records:

- a. What happened?
- b. Where?
- c. How?
- d. Extent and nature of the damage to the records?

F.2.4 Provide a statement of the safeguards established to prevent further loss of documentation:

- a. If appropriate, what immediate steps were taken to prevent/stop further deterioration to the damaged records?
- b. What analyses and actions were decided on and/or carried out to correct any situations in order to avoid/prevent future such incidents that could lead to damaged records?

F.2.5 When appropriate, provide details of the actions taken to salvage, retrieve, or reconstruct the records. (This will vary depending on the records media and the nature of the damage.)

Appendix G. Cloud Services Records Management Checklist

1. Have all of the key stakeholders (IT, Records Management, Department or Agency Management) met to discuss all relevant requirements before entering into a contract or SLA with a provider?
2. Has your cloud service provider met your regulatory requirements?
3. Have you assessed your provider's viability?
4. Does the provider guarantee record integrity, authenticity, and reliability?
5. Do we know who all the participants in the supply chain are (subcontractor layers in cloud-based services) so that we can engage in our (legally mandated) contracts with every party that touches this information?
6. What will happen to our data at the end of the contracting period?
7. Can we move some or all of our data from one provider to another (vendor lock-in, the use of proprietary software)?
8. Does the provider have the technical capability to capture, manage, retain, make available to authorized users, and apply retention schedules to the records or transfer permanent records to NARA?
9. Does the provider have sufficient audit management capabilities?
10. Has the contract or SLA specified ownership of records and data?
11. Does the provider have the technical capabilities to respond to access related issues? <ul style="list-style-type: none"> • access controls/permissions • record disposition/destruction actions • (If not, can they offer an acceptable proxy for disposition/destruction?) • security/privacy breaches • legal holds • e-Discovery
12. How are our data and records segregated from other tenants of this provider?